amepox Microelectronics LTD.

THERMOPOX 85CT

THERMALLY CONDUCTIVE EPOXY

* NEW GENERATION THERMALLY CONDUCTIVE EPOXY
* **VERY HIGH THERMALLY CONDUCTIVE COEFICIENT**
* **SMOOTH AND SOFT PASTE**
* **NO ELECTRICALLY INSULATION MATERIAL**

GENERAL DESCRIPTIONS:

THERMOPOX 85CT is two components, 100% solid - new generation thermally conductive formulation. This paste has special prepared copper type of filler with very high tap density value. At this way is possible to fill of **THERMOPOX 85CT** as high as 85% of this filler. Because copper is material with the best thermally coefficient value (after silver), is possible to offer formulation with extremely high and stable thermally properties over 2 W/mK (ov. 13 BTU in/ sqft hr F).

THERMOPOX 85CT is formulation with suitable working time, which allows sufficient time for all production applications. It possible to cure this system at room temperature initially also, with next post-curing in temperature range ab.100°C. Alternatively, the cure schedule may be shortened with moderate heat.

THERMOPOX 85CT has a very good adhesion to many different types of materials - especially glass, quartz, semiconductor chips and metals. Excellent thermally conductive properties are reason that **THERMOPOX 85CT** is ideal for all professional applications, where high heating occurs. This formulation is not electrically insulating material.

SPECIFICATIONS:

Number of components	Two.
Mixing ratio A : B (by weight)	10 : 0.3
Consistency after mixing A+B	Heavy paste, 100% solids.
Color	Dark red.
Percentage of fillers	85 ± 1%
Viscosity	630 000 – 680 000 cps (*) 630 – 680 Pa s.
Thixotropy index (1/10 rpm)	2.8 – 3.2
Recommended curing schedule	80° C - 40 min. 100° C - 30 min. 120° C - 15 min. 150° C - 6 min.
Acceptable curing conditions	50° C – 2 hours + post curing
Pot life	2.5 hours @ 25° C.
Storage	6 months with closed container @ 25° C.

(*) BROOKFIELD DVII; SSA#14; 1rpm; 25°C

PHYSICAL PROPERTIES (*):

Specific gravity(A+B)	3.7 – 3.9 g/ccm.
Thermal conductivity	**Min.: 1.4 – 2.2 W/mK.**
Electrical resistivity	> 5 x 10 E (6) Ωm (with thickness over 0.1mm)
Adhesion to ceramic after curing	No less like 0.8 kG

(*) – Typical value for number of tests.

ATTENTION:

THERMOPOX 85CT is supplied as a double component material and is available in a variety of screw-top plastic jar sizes only. Minimum quantity is 100 grams.

1. Mix **THERMOPOX 85CT** – Part "A" inside container very thoroughly before use. After adding hardener – Part "B", mix very thoroughly before use using wood or plastic spatula. Mix smoothly from the bottom of the container. Mix carefully - not to whip air into the product. ***INSURE THERMOPOX 85CT IS AT ROOM TEMPERATURE WHEN YOU WILL START WORKING WITH.***
2. Prepare consistency before use according your SPECIFICATION.
3. If you need, use AXMC **TH # 85** thinner. Thinner will change paste mechanical properties. Pls, do not exceed 1% of weight. After first tests pls let us know about your viscosity requirements – we will be able to change it for you.
4. Low mechanical properties and poor adhesion performance are symptomatic that **THERMOPOX 85CT** is under curing conditions.
5. Refrigeration during shelf time is useful. Keep container with formulation in temp. no less 10° C. Before use, increase paste temperature very slowly.
6. Use paste with adequate ventilation.
7. Avoid skin and eye contact. If ingested, consult a physician immediately.
8. Clean by MEK, alcohol or other suitable solvents.

WARNING:

Be careful on the case contacts with skin. When it occurs, wash immediately with soap and water.

This information is based on data and tests believed to be accurate. **AMEPOX MC** makes no warranties (expressed or implied) as to it`s accuracy and assumes no liability in connection with the use or inability to use this product.